

Claims

1. (1) A polypeptide which comprises the amino acid sequence represented by SEQ ID NO:2, and which is expressed specifically in rheumatoid arthritis patients, or (2) a polypeptide which comprises an amino acid sequence in which from 1 to several amino acids of the amino acid sequence represented by SEQ ID NO:2 are deleted and/or inserted, and which is expressed specifically in rheumatoid arthritis patients.

2. A polypeptide consisting of the amino acid sequence represented by SEQ ID NO:2.

3. A polynucleotide coding for the polypeptide according to claim 1 or claim 2.

4. An expression vector comprising the polynucleotide according to claim 3.

5. A cell transformed with the expression vector according to claim 4.

6. A method for inspecting rheumatoid arthritis, comprising

(1) a step of measuring an expression level in a subject of

i) a gene comprising the nucleotide sequence according to claim 3, or

ii) a gene comprising a nucleotide sequence of a polynucleotide coding for a polypeptide which comprises an amino acid sequence having 95% or more of homology with the amino acid sequence represented by SEQ ID NO:2 and which is expressed specifically in RA patients, and

(2) a step of comparing it with an expression level of the gene in a healthy person.

7. A rheumatoid arthritis inspection kit which comprises forward and reverse primers designed to specifically amplify

i) a gene comprising the nucleotide sequence according to claim 3, or

ii) a gene comprising a nucleotide sequence of a polynucleotide coding for a polypeptide which comprises an amino acid sequence having 95% or more of homology with the amino acid sequence represented by SEQ ID NO:2 and which is expressed specifically in RA patients.

8. A method for screening a substance capable of inhibiting activity of a polypeptide, comprising (1) a step of allowing a substance to be tested to contact with a cell

expressing the polypeptide according to claim 1 or claim 2 or a polypeptide which comprises an amino acid sequence having 95% or more of homology with the amino acid sequence represented by SEQ ID NO:2 and which is expressed specifically in RA patients, (2) a step of analyzing whether or not activity of the polypeptide is inhibited, and (3) a step of selecting a substance capable of inhibiting activity of the polypeptide.

9. The screening method according to claim 8, wherein the substance which inhibits the activity of the polypeptide according to claim 1 or claim 2, or of a polypeptide which comprises an amino acid sequence having 95% or more of homology with the amino acid sequence represented by SEQ ID NO:2 and which is expressed specifically in RA patients is a substance for the treatment of rheumatoid arthritis and/or a substance for the treatment of osteoarthritis.

10. A method for producing a pharmaceutical composition for the treatment of RA and/or the treatment of osteoarthritis, comprising

a step of carrying out screening with the use of the screening method according to claim 8 or claim 9, and

a step of formation using a substance obtained by the screening.